

# APERTURE PLATE FOR LITHOGRAPHY SYSTEMS

## Abstract

An aperture plate for lithography systems capable of improving NILS. The aperture plate includes a light-intercepting region and a light-transmitting region. The light-intercepting region has a reference center point. A horizontal reference line and a vertical reference line are defined on the light-intercepting region and intersect the reference center point. The light-transmitting region includes four pole apertures defining a central area. Two of the pole apertures are positioned on the horizontal reference line, and the other pole apertures are positioned on the vertical reference line. The light-transmitting region further includes at least a symmetric pattern aperture positioned in the central area, wherein the symmetric pattern aperture has a symmetric center overlapping the reference center point.